

Appln. No. 10/733,957
Response to Office Action dated Mar. 9, 2005
Amendment dated May 12, 2005

REMARKS/ARGUMENTS

Entry of this amendment and reconsideration of the present application are respectfully requested.

Claims 60, 62 and 64-68 are pending in this application, claims 1-59, 61 and 63 having been cancelled.

Claims 60, 65 and 66 are amended for clarification purposes and the changes to these claims do not raise new issues. As such, this Amendment should be entered.

For the Examiner's convenience, Annex A is attached hereto and includes all of the pending claims without changes marked thereon.

Interview Summary

The courtesies extended by the Examiner in a telephonic interview on February 15, 2005 are gratefully appreciated. In the interview, the Examiner provided his response to the arguments presented in the Amendment dated December 16, 2004.

Claim Rejections-35 U.S.C. §102

Claims 60, 62 and 64-68 were rejected under 35 U.S.C. §102(b) as being anticipated by Fortune et al. (U.S. Pat. No. 6,101,436).

The issue involved in this rejection is the Examiner's refutation of the applicants' assertion of their entitlement to the benefit of the filing date of U.S. patent application Ser. No. 08/474,783 (issued as U.S. Pat. No. 5,822,707, the '707 patent) which predates the effective filing date of Fortune et al. If the invention set forth in the pending claims is fully supported in the '707 patent in the manner provided by 35 U.S.C. §112, first paragraph, then Fortune et al. is not available as prior art and the rejection of claims 60, 62 and 64-68 should be removed.

Appln. No. 10/733,957
Response to Office Action dated Mar. 9, 2005
Amendment dated May 12, 2005

In the Office Action, the Examiner takes a position that the pending claims are not fully supported by the '707 patent and states "...the '707 patent does not reasonably provide enablement for 'measured pressure in said chamber and providing said signal to said control module, wherein said control module is arranged to control deployment of the airbag' as claim[ed] in claim 60". One reason asserted by the Examiner is that the control module 150 controls deployment of the airbag based on the signal received from the weight sensor 200 but not based on the measured pressure signal received from the pressure sensor in the container as set forth in independent claim 60. Similar reasons are alleged for the lack of support in the '707 patent for the subject matter of independent claims 62 and 65.

The Examiner's rejection is respectfully traversed on the grounds that claims 60, 62 and 65 do NOT recite that airbag deployment is controlled based on the measured pressure in the chamber of the bladder as alleged by the Examiner. Rather, claims 60, 62 and 65 recite the presence of a control module which both receives a signal based on the measured pressure in the chamber of the bladder and also controls airbag deployment, i.e., a common control module performs both functions. The claims are thus directed to the use of a single control module (or circuit) to obtain input from a pressure sensor associated with a bladder and also to control airbag deployment. Claims 60, 62 and 65 therefore allow for airbag deployment based on signals other than that received from the pressure sensor and on information other than the measured pressure in the chamber of the bladder. Indeed, the '707 patent fully supports control of airbag deployment based on signals from various sensors such as height sensors (see col. 11, lines 35-41).

Claims 60, 62 and 65 also do not recite nor limit use of the signal from the pressure sensor by the control module for controlling airbag deployment. Rather, the claimed embodiments allow for use of this signal by the control module to control, e.g., the stiffness of the seat (see col. 9, lines 63-66). This feature is set forth in dependent claims 67 and 68.

Appln. No. 10/733,957
Response to Office Action dated Mar. 9, 2005
Amendment dated May 12, 2005

The '707 patent fully supports the feature of a common control module 150 which controls multiple, different apparatus (e.g., an airbag and a seat) based on different inputs (height sensors for the airbag and weight sensors for the seat). Indeed, it is respectfully submitted that the specification of the '707 patent contains a written description of the presently claimed embodiments of the invention which enable any person skilled in the art to which it pertains to make and use the claimed embodiments in compliance with 35 U.S.C. §112, first paragraph. A person skilled in the art would readily appreciate in view of the repeated mention of a control circuit or control module (all designated by reference numeral 150) for receiving inputs from various sensors and providing specific outputs for controlling adjustment of various components (see col. 6, lines 14-28, col. 6, lines 36-50, col. 9, lines 54-66, col. 10, lines 52-55, col. 11, lines 35-41), that a single control circuit or control module may be provided and receives input from the pressure sensor in the seat (the embodiment shown in Fig. 5) and also controls output to an airbag deployment control unit (the embodiment shown in Fig. 9 for example). The designation of the control module or circuit by reference numeral 150 throughout the '707 patent would cause a person skilled in the art to consider the control module or circuit to be the same component both with respect to the discussion of Fig. 5 and the discussion of Figs. 9 and 9A.

In fact, the specification recites as a broad concept of the invention the measurement of one or more morphological characteristics, use of the characteristics to classify an occupant and use of the classification for adjustment of various vehicular components (col. 3, lines 1-14). One morphological characteristic is weight which may be determined "by a variety of technologies which measure either pressure on or displacement of the vehicle seat or the force in the seat supporting structure" (col. 3, lines 18-21). As mention in the '707 patent at col. 9, lines 60-63, the pressure in the container 515 gives an accurate measurement of the weight of the occupant. Hence, the measured pressure in the container or bladder is representative of or corresponds to the weight of the occupant and can be used as input to the control module 150 to control a vehicular component. Accordingly, a person skilled in the art would

Appln. No. 10/733,957
Response to Office Action dated Mar. 9, 2005
Amendment dated May 12, 2005

readily understand that the invention includes use of any and all such technologies which expressly or inherently measure weight, including the pressure sensor associated with the container or bladder discussed with respect to the embodiment shown in Fig. 5, for controlling the adjustment of vehicular components, including the airbag as discussed with reference to Figs. 9 and 9A.

This understanding is further reinforced by the recitation at col. 12, lines 56-64 after all of the various embodiments of the invention are described, that "there are other possible combinations using different morphological characteristics...of an occupant to accomplish the same or similar goals as described herein". This unequivocally implies that combinations of the different embodiments of the invention disclosed in the specification are considered part of the invention. One such combination is the use of the pressure sensor shown in Fig. 5 to provide input to a control module for controlling airbag deployment based thereon.

Additional reinforcement of the use of any disclosed morphological characteristic measuring system for controlling adjustment of a vehicular component is provided by Fig. 10A of the '707 patent which clearly shows a connection between a generic measurement means, processor, control means and an apparatus. A person skilled in the art would readily understand from Fig. 10A that the measurement means may be any of the measurement devices disclosed in the specification which measures a morphological characteristic of the occupant (including the pressure sensor of Fig. 5 which measures weight of the occupant), the processor can be a device which processes the measured morphological characteristics to obtain a control signal to provide for an adjusted position or use of an apparatus (for example, control module 150 which provides airbag adjustment parameters such as described with respect to Figs. 9 and 9A based on information about the occupant), and the control means is a device which adjusts the apparatus based on the control signal from the processor (e.g., an airbag valve 920, 930 as shown in Fig. 9A). This generic flow chart establishes the inventors' recognition of the possibility of using any of the disclosed morphological characteristic measuring systems for controlling an apparatus,

Appln. No. 10/733,957
Response to Office Action dated Mar. 9, 2005
Amendment dated May 12, 2005

including, inter alia, the use of weight as measured by any of the disclosed weight measuring systems for controlling deployment of an airbag.

In sum, it is respectfully submitted that the '707 patent fully supports the use of a common control module to both receive input from a pressure sensor in a seat and to control airbag deployment, as set forth in claims 60, 62 and 65. The same common control module can also perform numerous other functions as described in the '707 patent, e.g., control height sensors to determine the height of the occupant, adjust the seat based on the height of the occupant, adjust the seat based on the weight of the occupant, etc. Moreover, it is respectfully submitted that the '707 patent supports claims which combine weight measurement and airbag deployment control.

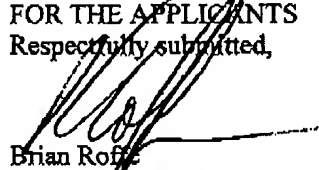
In view of the foregoing, it is respectfully submitted that all of the subject matter of the rejected claims is sufficiently disclosed in the '707 patent to be entitled to the benefit of the filing date thereof which precedes that of Fortune et al. As such, Fortune et al. should not be available as prior art.

Accordingly, the Examiner's rejection of claims 60, 62 and 64-68 as being anticipated by Fortune et al. has been overcome and should be removed and the present application should now be in condition for allowance.

The Examiner is respectfully requested to contact the undersigned to discuss this application after review of this Amendment.

An early and favorable action on the merits is earnestly solicited.

FOR THE APPLICANTS
Respectfully submitted,


Brian Roffe
Reg. No. 65,336

Brian Roffe, Esq.
11 Sunrise Plaza, Suite 303
Valley Stream, New York 11580-6111
Tel.: (516) 256-5636
Fax: (516) 256-5638

Appln. No. 10/733,957
Response to Office Action dated Mar. 9, 2005
Amendment dated May 12, 2005

ANNEX A

60. An apparatus for sensing pressure applied to a seat by an occupant of the seat and for controlling deployment of an airbag, comprising:

a bladder defining a chamber, said bladder being adapted to be arranged in a seat portion of the seat;

a control module arranged to control deployment of the airbag; and

a pressure sensor for measuring a pressure in said chamber, said pressure sensor generating a signal based on the measured pressure in said chamber and providing said signal to said control module.

62. A method for controlling an occupant restraint device arranged to protect an occupant in a vehicle in a crash involving the vehicle, comprising the steps of:

arranging a bladder defining a chamber in a seat portion of a seat in the vehicle;

measuring a pressure in the chamber;

providing a signal based on the measured pressure in the chamber to a control module; and

controlling deployment of the occupant restraint device by means of the control module.

64. The method of claim 62, wherein the occupant restraint device is an airbag.

65. A vehicle including a system for protecting an occupant in the vehicle in a crash involving the vehicle, comprising:

an occupant restraint device arranged in the vehicle to protect the occupant of the vehicle;

a seat having a seat portion;

a bladder having a chamber, said bladder being arranged in said seat portion;

a control module arranged to control deployment of said occupant restraint device; and

Appln. No. 10/733,957
Response to Office Action dated Mar 9, 2005
Amendment dated May 12, 2005

a pressure sensor for measuring a pressure in said chamber, said pressure sensor generating a signal based on the measured pressure in said chamber and providing said signal to said control module.

66. The system of claim 65, wherein said occupant restraint device is an airbag.

67. The method of claim 62, further comprising the step of controlling at least one other vehicular system, subsystem or component by means of the control module.

68. The method of claim 67, wherein the at least one other system, subsystem or component is a pressure control device which controls pressure in the chamber.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.